

CLAIMS

What is claimed is:

1. A method of forming an oil in water microemulsion, comprising the steps of:
providing at least one surfactant selected from the group consisting of non-ionic
ethoxylated surfactants;
providing an oil; and
mixing said surfactant and said oil to form a microemulsion.
2. The method of forming an oil in water microemulsion of claim 1, wherein said
surfactant is a single surfactant.
3. The method of forming an oil in water microemulsion of claim 1, wherein said oil
varies from 0.001 to 5 %, weight by weight of the final product (w/wf).
4. The method of forming an oil in water microemulsion of claim 1, wherein said
surfactant is selected from the group of alkyl phenol ethoxylates, wherein said alkyl group
contains 8 to 12 carbons and said ethoxylate contains an average of 4 to 12 ethoxylate groups.
5. The method of forming an oil in water microemulsion of claim 1, wherein said
surfactant is a nonyl phenol ethoxylate.

1 6. The method of forming an oil in water microemulsion of claim 1, wherein said
2 surfactant is a mixed surfactant comprising a nonyl phenol ethoxylate and an ionic surfactant.

1 7. The method of forming an oil in water microemulsion of claim 6, wherein said
2 ionic surfactant is an alkyl benzene sulfonate.

1 8. The method of forming an oil in water microemulsion of claim 7, wherein said
2 surfactants are used in the range of .003 to 25 % w/wf.

 9. The method of forming an oil in water microemulsion of claim 7, wherein said
surfactant to said oil ratio is at least 3:1 w/w.

 10. The method of forming an oil in water microemulsion of claim 1, wherein said oil
varies from 5 to 15 % w/wf, whereby a concentrate is formed.

1 11. The method of forming an oil in water microemulsion of claim 10, wherein said
2 surfactants total 15 to 60 % w/wf.

1 12. The method of forming an oil in water microemulsion of claim 6, wherein said
2 mixed surfactant includes at least one alkyl alcohol having 1 to 7 carbons.

1 13. The method of forming an oil in water microemulsion of claim 1, wherein an oil
2 droplet size ranges from approximately 5 nm to 80 nm.

1 14. The method of using a microemulsion formed by the method of claim 1, further
2 comprising the step of using said microemulsion for at least one of the group consisting of
3 cosmetics, toiletries, paints, varnishes, agrochemicals, medicines and pesticides.

1 15. An oil in water microemulsion, comprising:
2 at least one surfactant selected from the group consisting of non-ionic ethoxylated
3 surfactants; and
4 at least one oil.

1 16. The oil in water microemulsion of claim 15, wherein said at least one surfactant is a
2 single surfactant.

1 17. The oil in water microemulsion of claim 15, wherein said at least one oil is derived
2 from at least one tree.

1 18. The oil in water microemulsion of claim 17, wherein said tree comprises the Neem
2 Tree.